IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Banerjee, et. al.

Serial No.: 09/870,610

Filed: May 31, 2001

Title: System and Method for

Extending Server Security
Through Monitored Load

Management

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 § Group Art Unit: 2141 § Confirmation No.: 1787

§ Examiner: Bayard, Djenane M

§ Attorney Docket No. § AUS920010361US1

\$ A03920010301031

§ IBM Corporation § Intellectual Property Law

\$ Dept.
\$ 11400 Burnet Road
\$ Austin. Texas 78758

Certificate of Mailing or Transmission

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or electronically transmitted to the U.S. Patent and Trademark Office on the date shown below.

 /Leslie A. Van Leeuwen, Reg. No. 42,196/
 January 11, 2007

 Leslie A. Van Leeuwen, Reg. No. 42,196
 Date

APPELLANTS' REPLY BRIEF (37 CFR 1.193)

Sir:

Appellants now present this Reply Brief in response to the Examiner's Answer of November 15, 2006 and make the following responses to the Examiner's arguments. Appellants' Reply Brief responds to several of the arguments made by the Examiner in the Examiner's Answer. For a full discussion of Appellants' arguments, see Appellants' Appeal Brief, filed August 25, 2006.

A. STATUS OF CLAIMS

The Examiner's Answer states in Section "3" that "The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:" The Examiner's Answer, however, does not include a following statement. Appellants' have reviewed the statement of status of the claims contained in Appellants' Appeal Brief, and assert that the statement is correct.

Docket No. AUS920010361US1

Page 1 of 5

Atty Ref. No. 1020

B. APPELLANTS' CLAIMS 1, 5, 8, 11, 14, 18, AND 28-30 ARE PATENTABLE OVER LEWIS IN VIEW OF LOCKHART.

a) Configuration Settings

In the Examiner's Answer, the Examiner cites that "the Examiner is relying on analogous prior art for the purpose of rejecting the subject matter at issue," and proceeds to deduce that Lewis's "precursors" are analogous to Lockhart's "predetermined thresholds" in order to suggest that the Examiner is viewing Appellants' independent claims as a whole. As discussed below, Lewis's "precursors" are clearly not analogous to Lockhart's "predetermined thresholds" and, as a result, the Examiner does not view Appellants' independent claim as a whole. Rather, the Examiner dissects Appellants' independent claims into discrete elements and evaluates the elements in isolation, which is not allowed under MPEP 2106 as stated below:

"Finally, when evaluating the scope of a claim, every limitation in the claim must be considered. Office personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation. Instead, the claim as a whole must be considered."

As discussed in detail in Appellants' Appeal Brief, Lewis's "attack precursors" are identified events that occur prior to an attack. Lewis states, "...the variables icmplnMsgs, icmplnEchos, icmplnEchoReps, and icmpOutEchos are key variables for detecting Ping Flood Attacks since they are related to the inflows of pings (ICMP Echo Request messages) in the target machine" (page 6, para. 75). Lewis never teaches or suggests that these identified events are a numerical value, but rather an actual event as shown in the excerpt above.

In contrast, Lockhart's "predetermined threshold" is, in fact, a numerical value that is used in the determination of whether Lockhart received a number of requests from a particular source IP address that exceeds the predetermined threshold. As can be seen, Lockhart's "predetermined threshold" is in no way analogous to Lewis's "identified events" and, therefore, they may not be interchanged. Since the Examiner does, in fact, interchange these two items, the Examiner does not view Appellants' invention as a whole, but rather dissects Appellants' independent claims into discrete elements and evaluates the elements in isolation.

 b) Lockhart never teaches changing the predetermined threshold based upon attack simulations.

In the Examiner's Answer, the Examiner states that "Lockhart's "predetermined threshold" changed under attack." The Examiner, however, did not provide a location in Lockhart that shows Lockhart teaching such limitation. After further review of Lockhart, Lockhart never teaches or suggests changing the predetermined threshold before, during, or after an attack. Rather, Lockhart merely compares a number of requests with the predetermined threshold and accepts or rejects the request accordingly.

 c) Lewis's precursors are not based upon a number of packets received from a particular source IP address.

In the Examiner's Answer, the Examiner states that "it is well known in the art of networking that data can be collected upon a number of packets received from a particular source IP address," and implies that Lewis collects events in such a manner. The issue is not that Lewis collects a number of packets received from a particular source IP address, but that Lewis's precursors are not <u>based upon</u> a number of packets received from a particular source IP address (a quantity of packets). In fact, Lewis states, "Recall that it is not known which ones are the attacking machines..." (page 7, para. 87). Since Lewis knows that the event IP addresses are irrelevant to the invention because attacks can come from multiple machines, and since Lewis is interested in only identifying the type of event (discussed above), Lewis never teaches or suggests collecting event information <u>based upon</u> a source IP address.

The Examiner also states that "it would have been obvious to combine the teaching of Lewis et al of collecting data to determine a precursor with the teaching of Lockhart et al of collecting data based upon IP address to teach the claimed invention." As discussed above, Lewis's precursors are not a numerical value, and are not analogous with Lockhart's predetermined threshold. Again, the Examiner's statement stems from dissecting Appellants' independent claims into discrete elements and evaluating the elements in isolation, which is not allowed under MPEP 2106.

C. APPLELLANTS' CLAIM 27 IS PATENTABLE OVER PTACEK IN VIEW OF LOCKHART AND FURTHER IN VIEW OF BARRETT

In the Examiner's Answer, the Examiner states that "It would have been obvious to one with ordinary skill in the art to conclude that Ptacek is doing simulated network attack in order to test the vulnerabilities of the network and to adjust the configuration settings." Appellants', however, are not claiming merely adjusting a configuration setting but, rather Appellants' limitation claims "adjusting a server configuration setting based upon the analysis, wherein the adjusted server configuration setting is selected from the group consisting of the stored packet limit and the stored socket limit." Appellants assert that the Examiner's suggestion that this detail limitation would have been obvious to one with ordinary skill in the art is unfounded, especially since Ptacek's simulations do not send either 1) an excessive amount of packets (corresponding to the stored packet limit) from a particular source IP address or 2) request an excessive amount of sockets (corresponding to the stored socket limit) as claimed by Appellants.

As described above, and as further discussed in Appellants' Appeal Brief, Lewis in view of Lockhart simply do not teach each and every element of Appellants' independent claims 1, 8, and 14 as required to support a rejection under 35 U.S.C. §103(a). In addition, and as further discussed in Appellants' Appeal Brief, Ptacek in view of Lockhart and further in view of Barrett simply do not teach each and every element of Appellants' independent claim 27 as required to support a rejection under 35 U.S.C. §103(a). Moreover, as explained in Appellants' Appeal Brief, the prior art cited by the Examiner does not teach or suggest Appellants' other dependent claims, which are not discussed in this reply. Accordingly, each of Appellants' independent claims 1, 8, and 14 is allowable over Lewis in view of Lockhart, and Appellants' independent claim 27 is allowable over Ptacek in view of Lockhart and further in view of Barrett. Each of the remaining claims depends, directly or indirectly, on one of the independent claims and is therefore allowable for at least the same reasons.

Conclusion

For the foregoing reasons, Appellants respectfully submit that claims 1, 5, 8, 11, 14, 18, and 21-30 are patentable, and, accordingly, Appellants respectfully request that the Examiner's claim rejections be reversed and claims 1, 5, 8, 11, 14, 18, and 21-30 be allowed.

Respectfully submitted,

By <u>/Leslie A. Van Leeuwen, Reg. No. 42,196/</u> Leslie A. Van Leeuwen, Reg. No. 42,196 Van Leeuwen & Van Leeuwen Attorney for Appellants Telephone: (512) 301-6738 Faesimile: (512) 301-6742